## **Amendments to the Claims**

The listing of claims will replace all prior versions and listing of claims in the application:

## **Listing of Claims:**

5 Claims 1-30: Cancelled.

Claim 31 (currently amended): A compound of the formula:

or a pharmaceutically acceptable salt or solvate thereof.

5

10

15

Claim 32 (currently amended): A method of inhibiting one or more cyclin dependent kinases, comprising administering a therapeutically effective amount of at least one compound of claim 4 31 to a patient in need of such inhibition.

Claim 33 (currently amended): A method of treating one or more diseases associated with <u>a</u> eyclin dependent kinase, comprising administering a therapeutically effective amount of at least one compound of claim 4 <u>31</u> to a patient in need of such treatment.

Claim 34 (currently amended): The method of claim 33, wherein said eyelin dependent kinase is CDK2.

Claim 35 (currently amended): The method of claim 33, wherein said <del>cyclin</del> dependent kinase is mitogen activated protein kinase (MAPK/ERK).

Claim 36 (currently amended): The method of claim 33, wherein said eyelin dependent kinase is glycogen synthase kinase 3 (GSK3beta).

Claim 37 (original): The method of claim 33, wherein said disease is selected from the group consisting of:

cancer of the bladder, breast, colon, kidney, liver, lung, small cell lung cancer, esophagus, gall bladder, ovary, pancreas, stomach, cervix, thyroid, prostate, and skin, including squamous cell carcinoma;

leukemia, acute lymphocytic leukemia, acute lymphoblastic leukemia, B-cell lymphoma, T- cell lymphoma, Hodgkins lymphoma, non-Hodgkins lymphoma, hairy cell lymphoma and Burkett's lymphoma;

acute and chronic myelogenous leukemia, myelodysplastic syndrome and promyelocytic leukemia;

fibrosarcoma, rhabdomyosarcoma;

5

10

15

20

25

30

astrocytoma, neuroblastoma, glioma and schwannomas; melanoma, seminoma, teratocarcinoma, osteosarcoma, xenoderoma pigmentosum, keratoctanthoma, thyroid follicular cancer and Kaposi's sarcoma.

Claim 38 (currently amended): A method of treating one or more diseases associated with cyclin dependent kinase, comprising administering to a mammal in need of such treatment

an amount of a first compound, which is a compound of claim 1, or a pharmaceutically acceptable salt <del>or solvate</del> thereof; and

an amount of at least one second compound, said second compound being an anti-cancer agent;

wherein the amounts of the first compound and said second compound result in a therapeutic effect.

Claim 39 (original): The method of claim 38, further comprising radiation therapy.

Claim 40 (original): The method of claim 38, wherein said anti-cancer agent is selected from the group consisting of a cytostatic agent, cisplatin, doxorubicin, taxotere, taxol, etoposide, CPT-11, irinotecan, camptostar, topotecan, paclitaxel, docetaxel, epothilones, tamoxifen, 5-fluorouracil, methoxtrexate, 5FU, temozolomide, cyclophosphamide, SCH 66336, R115777, L778,123, BMS 214662, Iressa, Tarceva, antibodies to EGFR, Gleevec, intron, ara-C, adriamycin, cytoxan, gemcitabine, Uracil mustard, Chlormethine, Ifosfamide, Melphalan, Chlorambucil, Pipobroman, Triethylenemelamine, Triethylenethiophosphoramine, Busulfan, Carmustine, Lomustine,

- Streptozocin, Dacarbazine, Floxuridine, Cytarabine, 6-Mercaptopurine, 6-Thioguanine, Fludarabine phosphate, oxaliplatin, leucovirin, ELOXATIN<sup>TM</sup>, Pentostatine, Vinblastine, Vincristine, Vindesine, Bleomycin, Dactinomycin, Daunorubicin, Doxorubicin, Epirubicin, Idarubicin, Mithramycin,
- 5 Deoxycoformycin, Mitomycin-C, L-Asparaginase, Teniposide 17α-Ethinylestradiol, Diethylstilbestrol, Testosterone, Prednisone, Fluoxymesterone, Dromostanolone propionate, Testolactone, Megestrolacetate, Methylprednisolone, Methyltestosterone, Prednisolone, Triamcinolone, Chlorotrianisene, Hydroxyprogesterone, Aminoglutethimide,
- 10 Estramustine, Medroxyprogesteroneacetate, Leuprolide, Flutamide, Toremifene, goserelin, Cisplatin, Carboplatin, Hydroxyurea, Amsacrine, Procarbazine, Mitotane, Mitoxantrone, Levamisole, Navelbene, CPT-11, Anastrazole, Letrazole, Capecitabine, Reloxafine, Droloxafine, or Hexamethylmelamine..
- 15 Claim 41 (currently amended): A pharmaceutical composition comprising a therapeutically effective amount of at least one compound of claim 4 31 in combination with at least one pharmaceutically acceptable carrier.

  Claim 42 (original): The pharmaceutical composition of claim 39, additionally comprising one or more anti-cancer agents selected from the group consisting of cytostatic agent, cisplatin, doxorubicin, taxotere, taxol, etoposide, CPT-11, irinotecan, camptostar, topotecan, paclitaxel, docetaxel, epothilones, tamoxifen, 5-fluorouracil, methoxtrexate, 5FU, temozolomide, cyclophosphamide, SCH 66336, R115777, L778,123, BMS 214662, Iressa, Tarceva, antibodies to EGFR, Gleevec, intron, ara-C, adriamycin, cytoxan,
- gemcitabine, Uracil mustard, Chlormethine, Ifosfamide, Melphalan,
   Chlorambucil, Pipobroman, Triethylenemelamine,
   Triethylenethiophosphoramine, Busulfan, Carmustine, Lomustine,
   Streptozocin, Dacarbazine, Floxuridine, Cytarabine, 6-Mercaptopurine,
   6-Thioguanine, Fludarabine phosphate, Pentostatine, Vinblastine, Vincristine,
- Vindesine, Bleomycin, Dactinomycin, Daunorubicin, Doxorubicin, Epirubicin, Idarubicin, Mithramycin, Deoxycoformycin, Mitomycin-C, L-Asparaginase, Teniposide 17α-Ethinylestradiol, Diethylstilbestrol, Testosterone, Prednisone, Fluoxymesterone, Dromostanolone propionate, Testolactone,

Megestrolacetate, Methylprednisolone, Methyltestosterone, Prednisolone,
 Triamcinolone, Chlorotrianisene, Hydroxyprogesterone, Aminoglutethimide,
 Estramustine, Medroxyprogesteroneacetate, Leuprolide, Flutamide,
 Toremifene, goserelin, Cisplatin, Carboplatin, Hydroxyurea, Amsacrine,
 Procarbazine, Mitotane, Mitoxantrone, Levamisole, Navelbene, CPT-11,
 Anastrazole, Letrazole, Capecitabine, Reloxafine, Droloxafine, or
 Hexamethylmelamine.

Claim 43 (currently amended): A compound of claim 4 <u>31</u> in purified form.

Claim 44 (currently amended): A compound of the formula:

10

or a pharmaceutically acceptable salt or solvate thereof.

Claim 45 (currently amended): A compound of the formula:

or a pharmaceutically acceptable salt <del>or solvate</del> thereof.

15 Claim 46 (currently amended): A compound of the formula:

or a pharmaceutically acceptable salt or solvate thereof.

Claim 47 (currently amended): A compound of the formula:

or a pharmaceutically acceptable salt er selvate thereof.

Claim 48 (currently amended): A compound of the formula:

5 or a pharmaceutically acceptable salt or solvate thereof.

Claim 49 (currently amended): A compound of the formula:

or a pharmaceutically acceptable salt <del>or solvate</del> thereof.

Claim 50 (currently amended): A compound of the formula:

10

or a pharmaceutically acceptable salt or solvate thereof.

Claim 51 (currently amended): A compound of the formula:

or a pharmaceutically acceptable salt er solvate thereof.

Claim 52 (currently amended): A compound of the formula:

5 or a pharmaceutically acceptable salt or solvate thereof.

Claim 53 (currently amended): A compound of the formula:

or a pharmaceutically acceptable salt or solvate thereof.

Claim 54 (new claim): A compound of the formula:

10

or a pharmaceutically acceptable salt thereof.

Claim 55 (new claim): A method of inhibiting one or more cyclin dependent kinases, comprising administering a therapeutically effective amount of at least one compound of any of claims 44-54 to a patient.

Claim 56 (new claim): A method of treating one or more diseases associated with a kinase, comprising administering a therapeutically effective amount of at least one compound of any of claims 44-54 to a patient.

Claim 57 (new claim) The method of claim 56, wherein said disease is selected from the group consisting of:

cancer of the bladder, breast, colon, kidney, liver, lung, small cell lung cancer, esophagus, gall bladder, ovary, pancreas, stomach, cervix, thyroid, prostate, and skin, including squamous cell carcinoma;

leukemia, acute lymphocytic leukemia, acute lymphoblastic leukemia, B-cell lymphoma, T- cell lymphoma, Hodgkins lymphoma, non-Hodgkins lymphoma, hairy cell lymphoma and Burkett's lymphoma;

acute and chronic myelogenous leukemia, myelodysplastic syndrome and promyelocytic leukemia;

fibrosarcoma, rhabdomyosarcoma;

5

10

15

20

25

30

astrocytoma, neuroblastoma, glioma and schwannomas; melanoma, seminoma, teratocarcinoma, osteosarcoma, xenoderoma pigmentosum, keratoctanthoma, thyroid follicular cancer and Kaposi's sarcoma.

Claim 58 (new claim): A method of treating one or more diseases associated with cyclin dependent kinase, comprising administering to a mammal in need of such treatment

an amount of a first compound, which is a compound of claim 44-54, or a pharmaceutically acceptable salt thereof; and

an amount of temozolomide;

wherein the amounts of the first compound and said temozolomide result in a therapeutic effect.

Claim 59 (original): The method of claim 58, further comprising radiation therapy.

Claim 60 (new claim): A pharmaceutical composition comprising (i) a therapeutically effective amount of a compound of claim 44-54 or a pharmaceutically acceptable salt thereof, and (ii) temozolomide.

Claim 61 (new claim): A method of inhibiting one or more kinases, comprising administering the pharmaceutical composition of claim 60.

5

10

15

20

30

Claim 62 (new claim): The method of claim 61 wherein said kinase is a cyclin dependent kinase.

Claim 63 (new claim): A method of treating one or more diseases associated with a kinase, comprising administering the pharmaceutical composition of claim 60.

Claim 64 (new claim): A method of treating a cancer, comprising administering the pharmaceutical composition of claim 60.

Claim 65 (new claim): A method of treating a cancer, comprising administering a therapeutically effective amount of at least one compound of claim 31.

Claim 66 (new claim): The method of claim 65, wherein said cancer is selected from the group consisting of:

cancer of the bladder, breast, colon, kidney, liver, lung, small cell lung cancer, esophagus, gall bladder, ovary, pancreas, stomach, cervix, thyroid, prostate, and skin, including squamous cell carcinoma;

leukemia, acute lymphocytic leukemia, acute lymphoblastic leukemia, B-cell lymphoma, T- cell lymphoma, Hodgkins lymphoma, non-Hodgkins lymphoma, hairy cell lymphoma and Burkett's lymphoma;

acute and chronic myelogenous leukemia, myelodysplastic syndrome 25 and promyelocytic leukemia;

fibrosarcoma, rhabdomyosarcoma;

astrocytoma, neuroblastoma, glioma and schwannomas; melanoma, seminoma, teratocarcinoma, osteosarcoma, xenoderoma pigmentosum, keratoctanthoma, thyroid follicular cancer and Kaposi's sarcoma.

Claim 67 (new claim): A method of treating a cancer, comprising administering to a mammal in need of such treatment

an amount of a first compound, which is a compound of claim 31, or a pharmaceutically acceptable salt thereof;

and

30

Hexamethylmelamine.

an amount of at least one second compound, said second compound being an anti-cancer agent;

wherein the amounts of the first compound and said second compound result in a therapeutic effect.

Claim 68 (new claim): The method of claim 67, further comprising radiation therapy.

Claim 69 (new claim): The method of claim 67, wherein said anti-cancer agent is selected from the group consisting of a cytostatic agent, cisplatin,

- doxorubicin, taxotere, taxol, etoposide, CPT-11, irinotecan, camptostar, topotecan, paclitaxel, docetaxel, epothilones, tamoxifen, 5-fluorouracil, methoxtrexate, 5FU, temozolomide, cyclophosphamide, SCH 66336, R115777, L778,123, BMS 214662, Iressa, Tarceva, antibodies to EGFR, Gleevec, intron, ara-C, adriamycin, cytoxan, gemcitabine, Uracil mustard,
- Chlormethine, Ifosfamide, Melphalan, Chlorambucil, Pipobroman,
   Triethylenemelamine, Triethylenethiophosphoramine, Busulfan, Carmustine,
   Lomustine, Streptozocin, Dacarbazine, Floxuridine, Cytarabine,
   6-Mercaptopurine, 6-Thioguanine, Fludarabine phosphate, oxaliplatin,
   leucovirin, ELOXATIN<sup>TM</sup>, Pentostatine, Vinblastine, Vincristine, Vindesine,
- Bleomycin, Dactinomycin, Daunorubicin, Doxorubicin, Epirubicin, Idarubicin, Mithramycin, Deoxycoformycin, Mitomycin-C, L-Asparaginase, Teniposide 17α-Ethinylestradiol, Diethylstilbestrol, Testosterone, Prednisone, Fluoxymesterone, Dromostanolone propionate, Testolactone, Megestrolacetate, Methylprednisolone, Methyltestosterone, Prednisolone,
- 25 Triamcinolone, Chlorotrianisene, Hydroxyprogesterone, Aminoglutethimide, Estramustine, Medroxyprogesteroneacetate, Leuprolide, Flutamide, Toremifene, goserelin, Cisplatin, Carboplatin, Hydroxyurea, Amsacrine, Procarbazine, Mitotane, Mitoxantrone, Levamisole, Navelbene, CPT-11, Anastrazole, Letrazole, Capecitabine, Reloxafine, Droloxafine, or
- Claim 70 (new claim): A method of treating a cancer, comprising

administering (i) a therapeutically effective amount of at least one compound of claim 31, and (ii) temozolomide.